CLAIMS

What is claimed is:

1. A dicing saw blade retention assembly, comprising:

a shaped flange including a support member that extends substantially radially and a spacer member that extends substantially axially for spacing an adjacent radially extending surface of said support member a fixed distance apart from an axially adjacent member;

a retention element positioned on said spacer member;

a dicing saw blade positioned on said spacer member, between said support member and said retention element; and

at least one biasing element located adjacent said retention element, opposite said dicing saw blade to bias said retention element against said dicing saw blade.

2. The dicing saw blade retention assembly of claim 1, wherein said axially adjacent member comprises an axial spacer.

3 The dicing saw blade retention assembly of claim 2, further comprising:

at least one additional shaped flange positioned axially adjacent to said axial spacer, opposite said shaped flange;

at least one additional retention member positioned on a spacer member of said at least one additional shaped flange;

at least one additional saw blade positioned between said at least one additional retention member and a support member of said at least one additional shaped flange; and

at least another biasing element located adjacent said at least one additional retention element, opposite said at least one additional dicing saw blade to bias said at least one additional retention element against said at least one additional dicing saw blade.

4. The dicing saw blade retention assembly of claim 1, wherein said axially adjacent member comprises another shaped flange.

5. The dicing saw blade retention assembly of claim 4, wherein said shaped flange and said another shaped flange are oriented in opposite directions.

6. The dicing saw blade retention assembly of claim 4, further comprising:

another retention element positioned on a spacer member of said another shaped flange;

another dicing saw blade positioned between said another retention element and a support member of said another shaped flange, said at least one biasing element being positioned between said retention element and said another retention element to bias said retention element against said dicing saw blade and said another retention element against said another dicing saw blade.

7. The dicing saw blade retention assembly of claim 4, wherein said shaped flange and said another shaped flange are oriented in the same direction.

8. The dicing saw blade retention assembly of claim 7, wherein said at least one biasing element is positioned between a support member of said another shaped flange and said retention element.

9. The dicing saw blade retention assembly of claim 8, further comprising:

another axially adjacent member positioned adjacent to a spacer member of said another shaped flange;

another retention element positioned on said spacer member of said another shaped flange;

another dicing saw blade positioned between said another retention element and said support member of said another shaped flange; and

at least one other biasing element positioned between said another axially adjacent member and said another retention element, opposite said another dicing saw blade to bias said another retention element against said another dicing saw blade.

10. The dicing saw blade retention assembly of claim 1, wherein an aperture formed centrally through said retention element receives said spacer member of said shaped flange.

11. The dicing saw blade retention assembly of claim 1, wherein said at least one biasing element comprises a compressible, resilient structure.

12. The dicing saw blade retention assembly of claim 11, wherein said at least one biasing element comprises an o-ring.

13. The dicing saw blade retention assembly of claim 11, wherein said at least one biasing element comprises a spring.

14. The dicing saw blade retention assembly of claim 11, comprising a plurality of biasing elements arranged radially relative to said retention element.

15. The dicing saw blade retention assembly of claim 1, further comprising:
a retention feature on at least one of said retention element and a surface of said support member of said shaped flange located opposite said spacer member thereof.

16. The dicing saw blade retention assembly of claim 15, wherein said retention feature comprises at least one recess configured to receive at least a portion of said at least one biasing element and to facilitate compression thereof.

17. The dicing saw blade retention assembly of claim 16, wherein said at least one recess is configured to limit compression of said at least one biasing element.

18. A ganged dicing saw, comprising:
at least two shaped flanges, each shaped flange including a support member that extends substantially radially and a spacer member that extends substantially axially for at least

partially spacing an adjacent radially extending surface of said support member of one of said at least two shaped flanges a fixed distance apart from a corresponding radially extending surface of said support member of another of said at least two shaped flanges;

at least two retention element, each retention element positioned on said spacer member of a corresponding shaped flange of said at least two shaped flanges;

at least two dicing saw blades, each saw blade positioned on said spacer member of one of said at least two shaped flanges, between said support member and said retention element of said corresponding shaped flange; and

at least one biasing element located adjacent at least one retention element of said at least two retention elements, opposite one dicing saw blade of said at least two dicing saw blades to bias said at least one retention element against said one dicing saw blade.

19. The ganged dicing saw of claim 18, further comprising:

an axial spacer positioned axially between said at least two shaped flanges.

20. The ganged dicing saw of claim 18, wherein said at least two shaped flanges are oriented in opposite directions.

21. The ganged dicing saw of claim 20, wherein said spacer members of said at least two shaped flanges extend toward one another.

22. The ganged dicing saw of claim 21, wherein said at least one biasing element is positioned between adjacent ones of said at least two retention elements.

23. The ganged dicing saw of claim 18, wherein said at least two shaped flanges are oriented in the same direction.

24. The ganged dicing saw of claim 23, wherein said at least one biasing element is positioned between a support member of one of said at least two shaped flanges and a retention element that corresponds to another of said at least two shaped flanges.

25. The ganged dicing saw of claim 18, wherein an aperture formed centrally through each of said at least two retention elements receives said spacer members of said corresponding shaped flange.

26. The ganged dicing saw of claim 18, wherein said at least one biasing element comprises a compressible, resilient structure.

27. The ganged dicing saw of claim 26, wherein said at least one biasing element comprises an o-ring.

28. The ganged dicing saw of claim 26, wherein said at least one biasing element comprises a spring.

29. The ganged dicing saw of claim 26, comprising a plurality of biasing elements arranged radially relative to each of said at least two retention elements.

30. The ganged dicing saw of claim 18, further comprising retention features on at least one of said at least two retention elements and a surface of said support members of said at least two shaped flange located opposite said spacer members thereof.

31. The ganged dicing saw of claim 30, wherein said retention features each comprise at least one recess configured to receive at least a portion of said at least one biasing element and to facilitate compression thereof.

32. The ganged dicing saw of claim 31, wherein said at least one recess is configured to limit compression of said at least one biasing element.

33. A method for fixing distances between ganged saw blades, comprising:

assembling at least two shaped flanges onto a spindle of a ganged dicing saw, each shaped flange including a spacer member that extends substantially axially relative to said spindle and a support member that extends substantially radially relative to said spindle;

placing a dicing saw blade onto said spacer member of each shaped flange;

placing a retaining element onto said spacer member of each shaped flange, said dicing saw blade being positioned between said retaining element and said spacer member;

positioning at least one biasing element adjacent at least one retaining element, opposite a corresponding dicing saw blade;

forcing said at least two shaped flanges axially toward one another along said spindle, a distance between support members of said at least two shaped flanges being at least partially defined by said at least two shaped flanges, said forcing at least partially compressing said at least one biasing element to bias said at least one retaining element against said corresponding dicing saw blade and securing said corresponding dicing saw blade between said at least one retaining element and said corresponding dicing saw blade; and

securing at least said at least two shaped flanges into position along said spindle.

34. The method of claim 33, wherein said assembling comprises assembling said at least two shaped flanges in opposite orientations.

35. The method of claim 34, wherein said assembling comprises assembling said at least two shaped flanges in opposite orientations with said spacer members facing one another.

36. The method of claim 35, wherein said positioning comprises positioning said at least one biasing element between retaining elements on spacer members of said at least two shaped flanges.

37. The method of claim 33, wherein said assembling comprises assembling said at least two shaped flanges in the same orientation.